## ABSTRACT OF THE DISCLOSURE

A non-volatile storage device (1) has non-volatile memory units (FARY0 to FARY3), buffer units (BMRY0 to BMRY3) and a control unit (CNT), and the control unit can control a first access processing between an outside and the buffer unit and a second access processing between the non-volatile memory unit and the buffer unit upon receipt of directives from the outside separately from each other. The control unit can independently carry out an access control over the non-volatile memory unit and the buffer unit in accordance with the directives sent from the outside, respectively. Therefore, it is possible to set up next write data to the buffer unit simultaneously with the erase operation of the non-volatile memory unit or to output once read storage information to the buffer unit at a high speed as in a cache memory operation in accordance with the directive sent from the outside. Consequently, it is possible to reduce the overhead of a data transfer for reading/writing data from/to the non-volatile storage device.